

CLAIM AMENDMENTS

1-35 (Canceled)

36. (Currently Amended) A medical system, comprising:  
an elongated flexible catheter comprising a catheter distal end; and  
an elongated flexible sheath comprising an open sheath distal end, an internal lumen  
configured to house said catheter, one or more ~~skives located on open channels formed in an inner~~  
surface of said sheath distal end in fluid communication with said internal lumen, and one or more  
fluid exit ports located on said sheath distal end in fluid communication with said one or more ~~skives~~  
open channels, wherein said one or more fluid exit ports are configured to perfuse fluid in a  
substantially distal direction over said catheter distal end when said catheter distal end protrudes  
from said open sheath distal end.

37. (Previously Presented) The medical system of claim 36, wherein said inner surface of  
said sheath distal end substantially forms a seal with an outer surface of said catheter distal end.

38. (Previously Presented) The medical system of claim 36, wherein said one or more fluid  
exit ports comprise a plurality of fluid exit ports.

39. (Previously Presented) The medical system of claim 36, wherein said catheter is an  
ablation catheter having a distally mounted ablation electrode.

40. (Previously Presented) The medical system of claim 36, further comprising a catheter  
locking mechanism configured for axially fixing said catheter relative to said sheath.

41. (Previously Presented) The medical system of claim 40, wherein said catheter locking  
mechanism comprises an annular ridge located on one of said catheter and said sheath, and an

annular indentation located on the other of said catheter and said sheath, said annular ridge and said annular indentation configured for engaging each other when said catheter is advanced through said internal lumen of said sheath.

42. (Previously Presented) The medical system of claim 36, further comprising an irrigation fluid system in fluid communication with said internal lumen.

43. (Previously Presented) The medical system of claim 42, wherein said irrigation fluid system comprises a source of irrigation fluid and a pump for conveying said irrigation fluid under pressure to said one or more fluid exit ports.

44. (Previously Presented) The medical system of claim 42, wherein said irrigation fluid system comprises a source of another fluid that can be conveyed under pressure to said one or more fluid exit ports.

45. (Previously Presented) The medical system of claim 42, wherein said source of irrigation fluid is a source of cooled irrigation fluid.

46. (Previously Presented) The medical system of claim 36, wherein a proximal end of said sheath comprises a hemostasis valve.

47. (Previously Presented) The medical system of claim 36, wherein said sheath distal end is steerable.

48. (Previously Presented) The medical system of claim 36, wherein said sheath is an intravascular sheath, and said catheter is an intravascular catheter.

49. (Currently Amended) A medical guide sheath for use with an elongated flexible catheter, comprising:

an elongated flexible sheath body having an open distal end;

an internal lumen formed within said sheath body and being configured for housing the catheter;

one or more ~~skives located on open channels formed in~~ located on an inner surface of said sheath distal end in fluid communication with said internal lumen.

50. (Currently Amended) The medical guide sheath of claim 49, further comprising one or more fluid exit ports in fluid communication with said one or more ~~skives open channels~~, said one or more fluid exits ports configured to perfuse fluid in a substantially distal direction.

51. (Previously Presented) The medical guide sheath of claim 49, wherein said one or more fluid exit ports comprises a plurality of fluid exit ports.

52. (Previously Presented) The medical guide sheath of claim 49, further comprising a hemostasis valve mounted on a proximal end of said sheath body.

53. (Previously Presented) The medical guide sheath of claim 49, wherein said open distal end is steerable.

54. (Currently Amended) The medical guide sheath of claim 49, further comprising one or more fluid exit ports located on said sheath distal end in fluid communication with said one or more ~~skives open channels~~, wherein said one or more fluid exit ports are configured to perfuse fluid in a substantially distal direction.

55. (Previously Presented) The medical guide sheath of claim 49, wherein said guide sheath is an intravascular sheath.